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INTERNATIONAL BUSINESS MACHINES CORP
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EXAMINER

QUELER, ADAM M

ART UNIT	PAPER NUMBER
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2178

DATE MAILED: 07/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Supplemental
Notice of Allowability**

Application No.

10/766,764

Examiner

Adam M. Queler

Applicant(s)

CAI ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Phone call with Janet Skafar on 7/6/2006.
2. ☒ The allowed claim(s) is/are 1-4,6-14,16-24 and 26-30.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Janet Skafar on 7/6/2006.

The application has been amended as follows: **These changes are changes to the original claims and take the place of the previous Examiner's Amendments:**

1. A method of performing serialization of at least a portion of an object model comprising at least one namespace, comprising: preprocessing a query to identify any implicit no default namespaces, wherein the object model is associated with the query; searching for an ancestor namespace based on a current namespace, the ancestor namespace being associated with an ancestor prefix and an ancestor uniform resource identifier (URI), the current namespace being associated with a current prefix and current URI, such that the ancestor prefix matches the current prefix; and when the current namespace is an implicit no default namespace and the ancestor namespace is an explicit default namespace based on, at least in part, the ancestor prefix, generating a serialized namespace declaration for the current namespace.
2. The method of claim 1 wherein the serialized namespace declaration is a serialized XML namespace declaration.
3. The method of claim 1 wherein a stack stores the ancestor namespaces, and said searching searches the stack for the ancestor prefix, and further comprising: pushing the current prefix and current URI onto the stack.
4. The method of claim 1 further comprising: when no ancestor namespace has an ancestor prefix that matches the current prefix, or when an ancestor namespace matches the current prefix and the ancestor URI is different from the current URI, generating a serialized namespace declaration for the current namespace.
- 5 (CANCELLED)

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6. The method of claim ~~[[5]]~~ 1 wherein said generating generates the serialized namespace declaration when the implicit no default namespace is not a top constructor at the top query block, wherein the serialized namespace declaration is a no default namespace.
7. The method of claim 1 wherein the object model comprises at least one element, and a current tagging template represents the element, the tagging template having a pointer to a previous namespace declaration in an ancestor tagging template, wherein said searching searches for the ancestor namespace using the pointer.
8. The method of claim 7 wherein the tagging template further comprises an implicit-no-default indicator to indicate that a namespace declaration is implicit no default, and wherein said generating generates the serialized namespace declaration for the implicit no default namespace when the implicit-no-default indicator indicates that the current namespace is implicit no default.
9. The method of claim 1 further comprising: hashing the current prefix to an index of a hash anchor array, wherein said searching accesses the hash anchor array for the ancestor namespace.
10. The method of claim 1 further comprising: passing a template-chaining data structure comprising a pointer to a previous template-chaining data structure and also comprising a pointer to a namespace of a template, wherein said searching uses said template-chaining data structure to find the ancestor namespace declaration.
11. ~~An article of manufacture comprising a eA computer program usable readable medium~~ embodying one or more instructions executable by a computer for performing a method of serializing at least a portion of an object model comprising at least one namespace, the method comprising: preprocessing a query to identify any implicit no default namespaces, wherein the object model is associated with the query; searching for an ancestor namespace based on a current namespace, the ancestor namespace being associated with an ancestor prefix and an ancestor uniform resource identifier (URI), the current namespace being associated with a current prefix and current URI, such that the ancestor prefix matches the current prefix; and when the current namespace is an implicit no default namespace and the ancestor namespace is an explicit default namespace based on, at least in part, the ancestor prefix, generating a serialized namespace declaration for the current namespace.
12. ~~The article of manufacture~~computer readable medium of claim 11 wherein the serialized namespace declaration is a serialized XML namespace declaration.
13. ~~The article of manufacture~~computer readable medium of claim 11 wherein a stack stores the ancestor namespaces, said method further comprising: pushing the current prefix and URI onto the stack, wherein said searching searches the stack for the ancestor prefix.
14. ~~The article of manufacture~~computer readable medium of claim 11, said method further comprising: when no ancestor namespace has an ancestor prefix that matches the current prefix, or when an ancestor namespace matches the current prefix and the ancestor URI is different from the current URI, generating a serialized namespace declaration for the current namespace~~[[;]]~~.

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15. (CANCELLED)

16. ~~The article of manufacture~~computer readable medium of claim ~~4~~11 wherein said generating generates the serialized namespace declaration when the implicit no default namespace is not a top constructor at a top query block, wherein the serialized namespace declaration is a no default namespace.

17. ~~The article of manufacture~~computer readable medium of claim 11 wherein the object model comprises at least one element, and a current tagging template represents the element, the tagging template having a pointer to a previous namespace declaration in an ancestor tagging template, wherein said searching searches for the ancestor namespace using the pointer.

18. ~~The article of manufacture~~computer readable medium of claim 17 wherein the tagging template further comprises an implicit-no-default indicator to indicate that a namespace is implicit no default, further comprising determining whether the current namespace is implicit no default based on the implicit-no-default indicator.

19. ~~The article of manufacture~~computer readable medium of claim 11, said method further comprising: hashing the current prefix to an index of a hash anchor array, wherein said searching accesses the hash anchor array for the ancestor namespace.

20. ~~The article of manufacture~~computer readable medium of claim 11, said method further comprising: passing a current template-chaining data structure comprising a pointer to a previous template-chaining data structure and also comprising a pointer to the namespace declaration of a template, wherein said searching uses said current template-chaining data structure to find the ancestor namespace declaration.

21. An apparatus for performing serialization of at least a portion of an object model comprising at least one namespace, comprising: a processor; and a memory storing one or more instructions that cause the processor to: preprocess a query to identify any implicit no default namespaces, wherein the object model is associated with the query; search for an ancestor namespace based on a current namespace, the ancestor namespace being associated with an ancestor prefix and an ancestor uniform resource identifier (URI), the current namespace declaration being associated with a current prefix and current URI, such that the ancestor prefix matches the current prefix; and when the current namespace is an implicit no default namespace and the ancestor namespace is an explicit default namespace based on, at least in part, the ancestor prefix, generate a serialized namespace declaration for the current namespace.

22. The apparatus of claim 21 wherein the serialized namespace declaration is a serialized XML namespace declaration.

23. The apparatus of claim 21 wherein a stack stores the ancestor namespaces, and further comprising one or more instructions that: push the current prefix and URI onto the stack, wherein said one or more instructions that cause the processor to search searches the stack for the ancestor prefix.

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24. The apparatus of claim 21 further comprising one or more instructions that: when no ancestor namespace has an ancestor prefix that matches the current prefix, or when an ancestor namespace matches the current prefix and the ancestor URI is different from the current URI, generate the serialized namespace declaration for the current namespace[[;]].

25. (CANCELLED)

26. The apparatus of claim 21 ~~further comprising one or more instructions that:~~ wherein said one or more instructions that cause the processor to generate the serialized namespace declaration for are performed when the implicit no default namespace is not a top constructor at a top query block, wherein the serialized namespace declaration is no default namespace.

27. The apparatus of claim 21 wherein the object model comprises at least one element, and a current tagging template represents the element, the tagging template having a pointer to a previous namespace declaration in an ancestor tagging template, wherein said one or more instructions that cause the processor to search searches for the ancestor namespace using the pointer.

28. The apparatus of claim 27 wherein the tagging template further comprises an implicit-no-default indicator to indicate that a namespace is implicit no default, further comprising one or more instructions that: determine whether a namespace is implicit no default based on the implicit-no-default indicator.

29. The apparatus of claim 21 further comprising one or more instructions that: hash the current prefix to an index of a hash anchor array, wherein said searching one or more instructions that cause the processor to search accesses the hash anchor array for the ancestor namespace.

30. The apparatus of claim 21 further comprising one or more instructions that: pass a template-chaining data structure comprising a pointer to a previous template-chaining data structure and also comprising a pointer to the namespace of a template, wherein said searching uses one or more instructions that cause the processor to search searches using said template-chaining data structure to find the ancestor namespace declaration.

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam M. Queler whose telephone number is (571) 272-4140.

The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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STEPHEN HONG
SUPERVISORY PATENT EXAMINER